

14. **T**HANNE is ther a large Dyn, in maner of an extree, that goth thorow the hole, that halt the tables of the clymates and the riet in the wombe of the Moder, thorw which Dyn ther goth a litel wegge which that is cleped The Hors; that streyneth alle thise parties tohepe; this forseide grete Dyn, in maner of an extree, is imagined to be the Pol Artik in thyn Astrolabe. And for the more declaracioun, lo here the figure.

15. **T**HE wombe side of thyn Astrolabe is also devyded with a longe croys in foure quarters from est to west, fro south to north, fro right syde to left syde, as is the bak syde. And for the more declaracioun, lo here thy figure.

16. **T**HE bordure of which wombe side is devyded fro the poynt of the est lyne unto the poynt of the south lyne under the ring, in 90 degrees; & by that same proporcioun is every quarter devyded as is the bak syde, that amonteth 360 degrees. And understond wel, that degrees of this bordure ben answering and consenitrik to the degrees of the Equinoxial, that is devyded in the same nombre as every other cerle is in the heve hevene. This same bordure is devyded also with 23 lettres capitales and a smal croys above the south lyne, that sheweth the 24 houres equals of the klokke; and, as I have said, 5 of these degrees maken a mile wey, and 3 mile wey maken an houre. And every degree of this bordure conteneth 4 minutes, and every minut 60 secondes; now have I told thee twaye. And for the more declaracioun, lo here the figure.

17. **T**HE plate under thy riet is descryved with 3 principal cercles; of whiche the leste is cleped the cerle of Cancer, bycause that the heved of Cancer turneth evermore consenitrik upon the same cerle. In this heved of Cancer is the grettest declinacioun northward of the sonne. And therfor is he cleped the Solsticioun of Sommer; whiche declinacioun, aftur Ptholome, is 23 degrees and 50 minutes, as wel in Cancer as in Capricorne. This signe of Cancer is cleped the Tropik of Somer, of tropos, that is to seyn, agaynward; for thanne byginneth the sonne to passe fro usward. And for the more declaracioun, lo here the figure.

THE middel cerle in wyddesse, of these 3, is cleped the Cerle Equinoxial; upon whiche turneth evermo the hedes of Aries and Libra. And understond wel, that evermo this Cerle

Equinoxial turneth justly fro verrey est to verrey west; as I have shewed thee in the speres solide. This same cerle is cleped also the Meyere, equator, of the day; for when the sonne is in the hevedes of Aries and Libra, than ben the dayes & thenightes ilke of lengthe in al the world. And thenoxies. And alle that moeveth within the hevedes of these Aries & Libra, his moeveth withoute these hevedes, his moeveth cleped southward as fro the equinoxial. Tak keep of these latitudes north and south, and forget it nat. By this Cerle Equinoxial ben considered the 24 houres of the klokke; for evermo the arysing of degrees of the equinoxial maketh an houre equal of the klokke. This equinoxial is cleped the girdel of the firste moeving, or elles of the angulus primi motus vel primi mobilis. And nota, that firste moeving is cleped Moeving of the firste moevable of the 8 spere, whiche moeving is fro est to west, & eft agayn into est; also it is cleped Girdel of the first moeving, for it departeth the firste moevable, that is to seyn, the spere, in two ilke parties, evene distantz fro the poles of this world. The wydeste of these three principal cerles is cleped the Cerle of Capricorne, bycause that the heved of Capricorne turneth evermore consenitrik upon the same cerle. In the heved of this forseide Capricorne is the grettest declinacioun southward of the sonne, and therfor is it cleped the Solsticioun of Winter. This signe of Capricorne is also cleped the Tropik of Winter, for thanne byginneth the sonne to come agayn to usward. And for the more declaracioun, lo here thy figure.

18. **U**PON this forseide plate ben compassed certein cercles that highten Almicanteras, of which som of hem semen perfit cercles, and somme semen imperfit. The centre that standith amiddest the narwest cerle is cleped the Senith; & the netherest cerle, or the firste cerle, is cleped the Orisonte, that is to seyn, the cerle that devyde the two emispheres, that is, the partie of the hevene above the erthe and the partie benethe. These Almicanteras ben compowned by two and two, albeit so that on divers Astrolabies some Almicanteras ben devyded by oon, & some by two, and somme by three, after the quantite of the Astrolabe. This forseide senith is imagined to ben the verrey point over the crowne of thyn heved; and also this senith is the verrey pool of the orisonte in every regioun. And for the more declaracioun, lo here thy figure.

19. **F**ROM this senith, as it semeth, ther come a maner crokede strykes lyke to the clawes of a loppe, or elles like to the werk of a womanes calle, in kerving overthwart the Almikanteras. And these same strykes or divisiouns ben cleped Azimutz. And they devyden the orisonte of thyn Astrolabe in four and twenty divisiouns. And these Azimutz serven to knowe the costes of the firmament, and to othere conclusiouns, as for to knowe the cenith of the sonne and of every sterre. And for more declaracioun, lo here thy figure.

20. **N**EXT these azimutz, under the Cerle of Cancer, ben ther twelve divisiouns embelif, moche like to the shap of the azimutes, that shewen the spaces of the houres of planetes; and for more declaracioun, lo here thy figure.

21. **T**HE Riet of thyn Astrolabe with thy zodiak, shapen in maner of a net or of a loppe webbe after the olde descriptioun, as thyself lyketh, conteneth certein nombre of sterres fixes, with hir longitudes and latitudes determinat; yif so be that the makere have nat erred. The names of the sterres ben writen in the margin of the riet theras they sitte; of whiche sterres the smale poynt is cleped the Centre. And understond also that alle sterres sittinge within the zodiak of thyn Astrolabe ben cleped sterres of the north, for they arysen by northe the est lyne. And alle the remenant fixed, out of the zodiak, ben cleped sterres of the south; but I seynat that they arysen alle by southe the est lyne; witenesse on Aldeberan and Algomeysa. Generally understond this rewle, that thilke sterres that ben cleped sterres of the north arysen rather than the degree of hir longitude, & alle the sterres of the south arysen after the degree of hir longitude; this is to seyn, sterres fixed in thyn Astrolabe. The mesure of this longitude of sterres is taken in the lyne ecliptik of hevene, under which lyne, whan that the sonne & the mone ben lyne right or elles in the superfice of this lyne, than is the eclips of the sonne or of the mone; as I shal declare, and eek the cause why. But sothly the Ecliptik Lyne of thy zodiak is the outtereste bordure of thy zodiak, ther the degrees ben marked. Thy zodiak of thyn Astrolabe is shapen as a compas which that conteneth a large brede, as after the quantite of thyn Astrolabe; in ensample that the zodiak in hevene is imagined to ben a superfice contening a latitude of twelve degrees, wheras al the remenant of cerles in the hevene ben im-

aged verrey lynes withoute eny latitude. Amiddest this celestial zodiak ys imaginied a lyne, which that is cleped the Ecliptik Lyne, under which lyne is evermo the wey of the sonne. Thus ben ther six degrees of the zodiak on that on side of the lyne, and six degrees on that other. This zodiak is divided in twelve principal divisiouns, that departen the twelve signes. And, for the streitnes of thyn Astrolabe, than is every smal divisioun in a signe departid by two degrees and two; I mene degrees contening sixty minutes. And this forseide hevenish zodiak is cleped the Cerle of the Signes, or the Cerle of the Bestes; for zodia in langage of Greek sowneth Bestes in Latin tonge; and in the zodiak ben the twelve signes that han name of bestes; or elles, for whan the sonne entreteth in any of the signes, he taketh the propretee of swich bestes; or elles, for that the sterres that ben there fixed ben disposed in signes of bestes, or shape like bestes; or elles, whan the planetes ben under thilke signes, they causen us by hir influence operaciouns & effectes lyk to the operaciouns of bestes. And understonde also, that whan an hot planete cometh into an hot signe, than encresseth his hete; & yif a planete be cold, thanne amenuseth his coldnesse, bycause of the hote signe. And by this conclusioun maystow take ensample in alle the signes, be they moist or drye, or moeble or fix; rekenynge the qualitee of the planete as I first seide. And everich of these twelve signes hath respecte to a certein parcellle of the body of a man and hath it in governance; as Aries hath thyn heved, and Taurus thy necke & thy throte, Gemini thyn armholes & thyn armes, and so forth; as shal be shewed more pleyn in the fifte partie of this tretis. This zodiak, which that is part of the eightespere, overkerveth the equinoxial; & he overkerveth him again in evene parties; & that on half declineth southward, & that other northward, as pleynly declareth the tretis of the spere. And for more declaracioun, lo here thy figure.

22. **T**HANNE hastowa label, that is schapen lyk a rewle, save that it is streit & hath no plates on either ende with holes; but, with the smale point of the forseide label, shaltow calcule thyne equaciouns in the bordure of thyn Astrolabe, as by thyn almyry. And for the more declaracioun, lo here thy figure.

23. **T**HYN Almyry is cleped the Denticle of Capricorne, or elles the Calculer. This same Almyry sit fix in the hed of Capricorne, and it serveth of many